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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,713	08/07/2001	Robert W. McConnell	H0001668	1569

7590

03/31/2003

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EXAMINER

DEBERADINIS, ROBERT L

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/923,713

Applicant(s)
ROBERT T W. McCONNELL et al.

Examiner
Robert L. DeBeradinis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 7, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Aug 7, 2001 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JUNGREIS 6,304,006 in view of WAGNER 6,055,163.

Regarding claims 1, 2, 4, 6, 7, 8, 11, 12, 14, 16, 17, 18.

JUNGREIS discloses a controller for a microturbine generator system

(column 3, line 16), said controller comprising:

a computer control unit (140);

a utility power grid sensor input to said computer control unit (column 5, lines 53-55);

a utility grid power inverter command output line from said computer control unit;

wherein said computer control unit causes automatic transitions of the microturbine generator system to change states, said states comprising a generator standby backup mode (column 5, lines 36-37), a transfer to standby backup mode.

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JUNGREIS does not disclose wherein said computer control states comprising:

a utility power grid disconnect;

a generator standalone mode, and a generator startup battery charging mode.

WAGNER discloses a utility power grid disconnect command output line from LPU controller (200) to contactor K1 (column 4, lines 37-41).

It would have been obvious to one having ordinary skill in the art at the time of this invention to provide a utility power grid disconnect command output from said computer unit wherein said computer unit causes automatic transitions of the microturbine generator system between at least four states, said at least four states comprising a generator standby backup mode, a generator standalone mode, a transfer to standby backup mode, and a generator start battery charging mode, to provide a means to disconnect the grid parallel inverter from the supply grid to select a generator standalone mode and to provide a generator start battery charging mode to supply a charge to the battery in the event the grid disconnect is disconnected for long periods of time, periods long enough that the battery would potentially discharge, to maintain a safe charge to ensure standby operation when standby mode is selected.

Regarding claims 3, 13.

JUNGREIS discloses the controller (140) of claim 1 wherein additionally comprising a utility circuit breaker status input line to said computer control unit (141).

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Regarding claims 5, 15.

JUNGREIS in view of WAGNER disclose the controller of claim 1 wherein the controller controls a generator standby backup mode (column 5, lines 37, 38).

JUNGREIS does not disclose a generator power- down sequence, disconnects a load from an output from the generator, and connects the load to a utility power grid.

It would have been obvious to one having ordinary skill in the art at the time of this invention to include a generator power- down sequence to transfer the load from the generator to the grid to switch the generator back to a standby mode.

3. Claims 9, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JUNGREIS 6,304,006 in view of WAGNER 6,055,163 in further view of SWARTZENTRUBER 6,476,697.

Regarding claims 9, 19.

JUNGREIS in view of WAGNER disclose the controller of claim 8.

JUNGREIS in view of WAGNER do not disclose wherein said contactor comprises an auxiliary contact for providing status of said contactor to said computer unit via a utility grid disconnect relay status line.

SWARTZENTRUBER discloses a modular multi-phase contactor wherein said contactor comprises an auxiliary contact for providing status of said contactor (figure 1, 38).

It would have been obvious to one having ordinary skill in the art at the time of this invention to provide a contactor wherein said contactor comprises an auxiliary contact for

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providing status of said contactor to said computer unit via a utility grid disconnect relay status line, to sense the contactor state.

4. Claims 10, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JUNGREIS 6,304,006 in view of WAGNER 6,055,163.

Regarding claims 10, 20.

JUNGREIS in view of WAGNER disclose the controller of claim 8.

JUNGREIS in view of WAGNER do not disclose a utility grid disconnect relay controlling said contactor.

BRUSOV discloses relay (1) is connected to the contactor (5) to disconnect contactor contacts (8) from power source (A,B,C).

It would have been obvious to one having ordinary skill in the art at the time of this invention to provide a utility grid disconnect relay controlling said contactor to control the contactor from the low power logic outputs of the microcomputer.

Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (703) 306-5857. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on (703) 308-3119. The fax phone number for this Group is (703) 308-7722.

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RLD

MARCH 17, 2003

Robert R. Asmuth